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7 CSI SUMMARY AND CONCLUSIONS

Numerous phases of investigation and remediation have been completed at the AmerenIP Champaign MGP Site in Champaign. Illinois. This site was the location of manufactured gas production for more than sixty years. Sufficient data has been collected to show that impacted soils exceeding Tier 1 ROs are present on the remediation Site and on adjacent offsite properties. This section provides a summary of degree and extent of impacts and provides several figures to illustrate the extent of MGP residuals present at the Site.

The extent of impact is based primarily upon a comparison of BTEX and PAH results to Tier I ROs. While these constituents are present within MGP residual materials, their presence may also be derived from other non-MGP sources. No attempt has been made to differentiate or determine the possible sources for these constituents.

7.1 Horizontal Extent of Soil Impact

Figures 6-1, 6-3, and 6-5 illustrate the results of the Tier 1 RO comparison for BTEX and PAH constituents for soil by depth interval. Boring locations that exceed Tier 1 ROs for one or more exposure pathway are highlighted in red. These figures illustrate the wide spread nature of soil impact. Impact is present on some residential properties to the north, west, and south and commercial properties to the east of the Site. Off-site impacts appear greater in concentration and area to the north and west of the Site, which is consistent with the direction of shallow groundwater flow.

7.2 Vertical Extent of Soil Impact

Analytical results and field observations indicate that the highest levels of impact are present in the deep subsurface soils (greater than 10-feet in depth.) Nine borings north of the Site contained MGP residual impact at greater than 10-feet; three borings had impact in the 3- to 10-foot depth, and two contained impact in the 0- to 3-foot depth interval.

Three borings west of the Site contained impact in the 0- to 3-foot depth interval, four borings were impacted in the 3- to 10-foot depth interval, and five contained impact in the greater than 10-foot depth interval.

Two borings located south of the Site contained MGP residual impact on the 0- to 3-foot depth interval; one boring had impact in the 3- to 10-foot depth interval, and two borings contained impact in the greater than 10-foot depth interval.

Only one boring east of the Site (B-809) had residual impact. Exceedances for four PAH constituents were identified in the 0- to 3-foot depth interval.

Boring B-834 located northwest of the Site exhibited MGP residual impacts in two depth zones: 11.5- to 12.5-feet and 15- to 16-feet.

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